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Conference Abstract

Knowledge Base on Species Life Traits: A Spanish/ French Plinian Core implementation use case

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Abstract

The French “Traits” working group was created in 2021 to support the development of the national knowledge base on species life traits managed by the PatriNat department*[1], to identify and implement a suitable standard for managing and sharing species life traits (including interactions) at the national, then international, level. Its core members are part of several PatriNat teams (Species Knowledge, Dissemination & Mediation, Coordination of Information Systems), as well as other French research units*[2] working on the topic of traits and ontologies.

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The Plinian Core (Plinian Core Task Group 2021) was first discussed in 2004 and its development began in 2005–2006 when the first version was deployed as a collaboration between InBIO*[3] (Costa Rica) and GBIF Spain*[4]. It reuses and extends the Darwin Core vocabulary (Wieczorek et al. 2012, Darwin Core Maintenance Interest Group 2014) to describe different aspects of biological species information, that is, all kinds of properties or traits related to taxa, including biological and non-biological species traits.

The Plinian Core was discussed with Dr Pando (convener of the TDWG Plinian Core Task Group*[5]) during one of the Traits working group meetings, and was found to be relevant to the French species life traits database (currently in development). The Traits working group future works will be following the example of the Plinian Core-based EIDOS database*[6] (Spanish Ministry for the Ecological Transition), which allows for detailed species pages with distinct information sections (e.g., interactions, taxonomy, legal status, conservation). This collaboration resulted in a Capacity Enhancement Support Programme project submission (GBIF 2023) between French and Spanish partners, allowing for the consolidation of both the infrastructure and the sharing process of species life traits for taxa found on all French territories, as well as European Union territories.

Additionally, this is an opportunity to provide information to GBIF (Global Biodiversity Information Facility) through a new update of the TAXREF (Gargominy 2022) national checklist, one of the core constituents of the GBIF Backbone Taxonomy (GBIF 2022). Species life traits and interactions will be added thanks to the new Plinian Core extension implemented on the GBIF Integrated Publishing Toolkit (IPT),*[7] and an Atlas of Living Australia's architecture BIE (Biodiversity Information Explorer) module*[8] developed by Costa Rica in the context of a Capacity Enhancement Support Programme (CESP) project carried out with SIBBR*[9] (GBIF Brasil).

Keywords

base of knowledge, species life traits, Plinian Core, taxon description, ontologies, taxonomical information sharing, taxonomic database, checklist enrichment

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Conflicts of interest

The authors have declared that no competing interests exist.

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Endnotes

*1 https://www.patrinat.fr/fr

*2 CR2P (Center for Research on Palaeontology - Paris), ISYEB (Institute of Systematics, Evolution and Biodiversity), Université Côte-d'Azur/CNRS (French National Centre for Scientific Research)/Inria (National Institute for Research in Digital Science and Technology)

*3 Instituto Nacional de Biodiversidad (INBio), Costa Rica: https://www.gbif.org/fr/publisher/5c7a5c20-1bd0-11d8-a2da-b8a03c50a862

*4 https://www.gbif.es/en/

*5 https://www.tdwg.org/community/species/plinian-core/

*6 Information on wild species present in Spain: https://www.miteco.gob.es/es/biodiversidad/servicios/banco-datos-naturaleza/Eidos_acceso.aspx

*7 https://www.gbif.org/fr/ipt

*8 www.ala.org.au/bie/

*9 https://www.sibbr.gov.br/